

Waste Disposal

This section will discuss past and current practices of waste disposal at the refuge and contamination issues associated with these practices.

Waste Burial and Repository

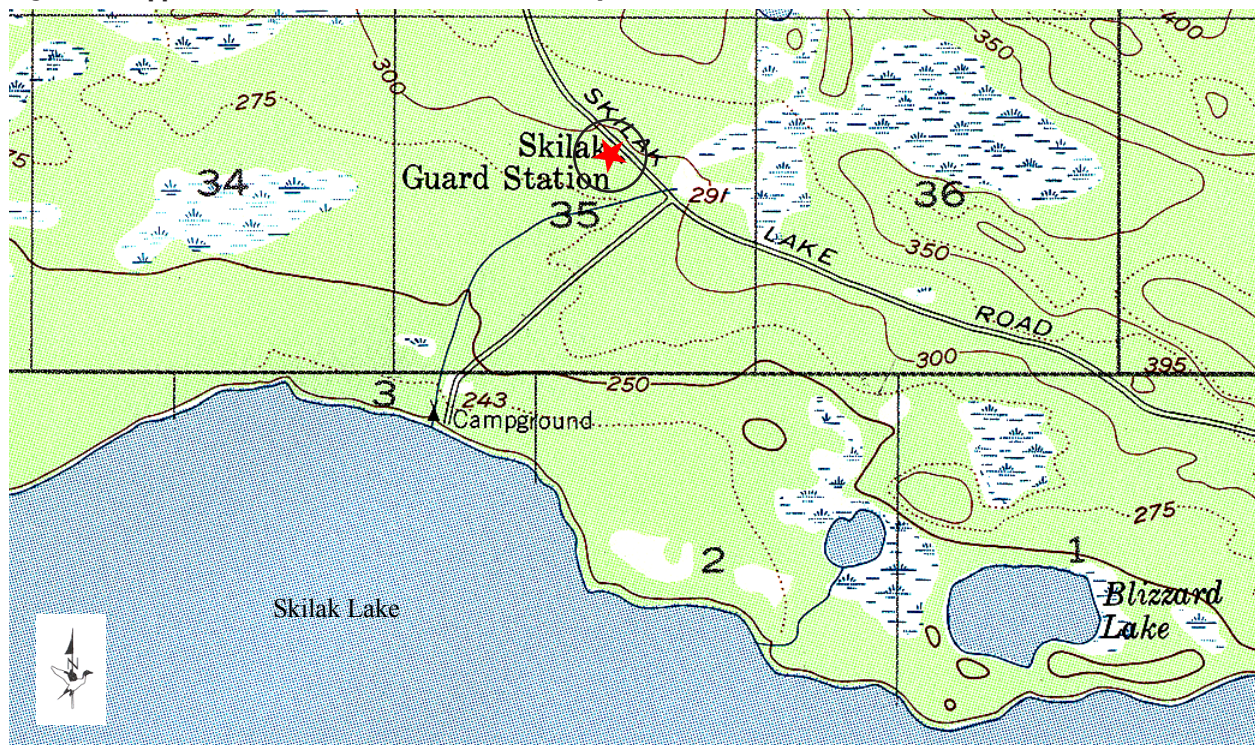
For decades, the most common method of trash disposal on the refuge was burial. Additionally, wastes were deposited in repositories on the refuge.

Until 1965, seismic crews were allowed to bury their trash on the refuge, to the point where the unearthing of trash near winter seismic camps by bears became a problem. Additionally, the refuge narratives document trash burial in the 1960s by USFWS personnel at the refuge campgrounds.

Since the establishment of the range/refuge in 1941, an area known as the “Skilak Boneyard,” located at the Skilak Guard Station, was a repository for old signs, lumber, pipe, fuel drums, etc. (star indicates approximate location, Figure 11).

Over the years, this site has been used by the refuge, BLM, the State of Alaska and the military during WWII. Historically, the Guard

Figure 11. Approximate Location of the Skilak Boneyard.



U.S. Geological Survey. Kenai (B-2) Quadrangle, Alaska-Kenai Peninsula Borough, 1:63 360 Series (Topographic).



Liquid-filled 55-gallon drums at the Skilak Boneyard prior to proper removal and disposal. USFWS Photo by Robert A Richey.

Station also was used by the BLM to accommodate seasonal fire personnel and was utilized as a helicopter refueling base. Currently, the Guard Station is used for housing USFWS seasonal personnel.

In 1988, refuge personnel initiated a large-scale cleanup at the boneyard. During cleanup efforts, 47 drums with various contents were discovered; 31 drums were full or partially full. Two of the drums contained pentachlorophenol (PCP). In 1992, 300 cubic yards of soil were excavated and then remediated by land spreading. All drums were disposed of in accordance with State and Federal regulations. On December 30, 1993, ADEC determined no further action was needed at the site and approved site closure.



Recreational vehicle dump station and lagoon. USFWS Photo by Tiffany A. S. Parson.

Recreational Vehicle Dump Station and Evaporation Lagoon

Due to increasing recreational use on the refuge, an RV dump station and lagoon were constructed in 1993. The dump station and lagoon are located eight miles from the west entrance of Skilak Loop Road. The well is operated by a remote solar-powered generating system with liquid and solid wastes being gravity-fed into an open lagoon system. Although a fence surrounds the open lagoon, wildlife still could enter this area. The lagoon is lined, and there is no apparent evidence for leaching. Fecal coliform, total coliform, sewage, urea, other nitrogenous compounds and chemicals used to treat sewage can negatively impact water quality and human health, thus if the lagoon liner was ever breached, groundwater in the area could be negatively impacted.

Waste Disposal at Swanson River and Beaver Creek Fields

Over the years, an unknown quantity of waste has been buried at the oil and gas fields. Due to the age of SRF, waste burial was likely a common method of disposal until environmental regulations tightened in the 1970s and 1980s. During PCB and xylene cleanup



Solid waste facility at Swanson River Field. USFWS Photo by Tiffany A. S. Parson.



A closer look at one section of the Swanson River Field solid waste facility. USFWS Photo by Tiffany A. S. Parson.

activities at SRF, previously buried wastes were “discovered.” In June 1989, while excavating PCB contaminated soils at SRF, a 300-gallon underground storage tank (UST) was discovered and removed at the Therminol building. Also, during xylene cleanup efforts in 1998 and 1999 at the Pipe and Supply Yard, buried metal debris was unearthed. Some of the metal debris was thought to be from the compressor plant explosion in 1972 because some PCB contamination was discovered.

It was not until 1986 when a solid waste disposal facility was constructed at SRF. The 1-33 skim pit was used historically as a repository for SRF liquid wastes since the late 1950s, and it was not until 1990 when this facility was dismantled and replaced with an advanced separation facility. It should be noted that some concrete from the dismantled 1-33 skim pit was contaminated with PCBs; proper disposal occurred upon removal.

According to refuge personnel, prior to 1988 solid wastes were never permanently stored at BCF. Wastes were held in large plastic totes and when filled, they were taken off site for proper disposal. However, in 1988 waste disposal cells were constructed at BCF. SRF and BCF keep lists of the disposal contents.



Solid waste facility at Beaver Creek Field. USFWS Photo by Tiffany A. S. Parson.

Summary: Waste Disposal

Although solid waste inevitably has been buried on the refuge, the exact burial locations are mostly unknown. Even if these locations were known, in some instances it may cause more damage to the refuge to exhume the debris than to leave it buried.